

We Claim:

1. A printer having at least one inkjet printhead which comprises
a substrate;
a plurality of nozzles positioned on the substrate, each nozzle comprising
5 a nozzle chamber and an aperture through which ink from the nozzle chamber is ejected;
an actuator that is operatively positioned with respect to the nozzle chamber for causing ejection
of ink within the nozzle chamber from the aperture; and
drive circuitry arranged on the substrate and connected to the actuator to control operation of the
actuator;
10 wherein the drive circuitry and the actuator of each nozzle extend over a common portion of the
substrate.
2. The printer of claim 1 wherein the actuator comprises a thermal actuator incorporating a heating
circuit, and wherein the drive circuitry is adapted to provide an electrical current to said heating circuit.
- 15 3. The printer of claim 2 wherein the thermal actuator includes a paddle disposed within the nozzle
chamber and being connected to a lever arm for pivotal movement of the paddle within the nozzle
chamber.
- 20 4. The printer of claim 1 wherein the substrate is a silicon wafer.
5. The printer of claim 1 wherein the actuator is at least partially external to the nozzle chamber.
6. The printer of claim 1 wherein the drive circuitry and the actuator overlap in plan view.
- 25 7. An inkjet printhead which comprises
a substrate;
a plurality of nozzles positioned on the substrate, each nozzle comprising
a nozzle chamber and an aperture through which ink from the nozzle chamber is ejected;
30 an actuator that is operatively positioned with respect to the nozzle chamber for causing ejection
of ink within the nozzle chamber from the aperture; and
drive circuitry arranged on the substrate and connected to the actuator to control operation of the
actuator;
wherein the drive circuitry and the actuator of each nozzle extend over a common portion of the
35 substrate.
8. The printhead of claim 7 wherein the actuator comprises a thermal actuator incorporating a heating
circuit, and wherein the drive circuitry is adapted to provide an electrical current to said heating circuit.
- 40 9. The printhead of claim 8 wherein the thermal actuator includes a paddle disposed within the nozzle

chamber and being connected to a lever arm for pivotal movement of the paddle within the nozzle chamber.

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10. The printhead of claim 7 wherein the substrate is a silicon wafer.
11. The printhead of claim 7 wherein the actuator is at least partially external to the nozzle chamber.
12. The printhead of claim 7 wherein the drive circuitry and the actuator overlap in plan view.